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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.	
10/560,077	05/15/2006	Shintaro Kobayashi	P28961 1087	
	7590 08/25/201 & BERNSTEIN, P.L.0	EXAMINER		
	CLARKE PLACE	IQBAL, SYED TAHA		
KESTON, VA	20191		ART UNIT	PAPER NUMBER
			1793	
			NOTIFICATION DATE	DELIVERY MODE
			08/25/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com pto@gbpatent.com

Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/560,077	KOBAYASHI ET AL		
Examiner	Art Unit		
SYED IQBAL	1793		

SY	/ED IQBAL	1793	
The MAILING DATE of this communication appears	on the cover sheet with the c	orrespondence addi	ess
THE REPLY FILED 03 August 2010 FAILS TO PLACE THIS APPL	ICATION IN CONDITION FOR	ALLOWANCE.	
1. The reply was filed after a final rejection, but prior to or on the application, applicant must timely file one of the following repli application in condition for allowance; (2) a Notice of Appeal (for Continued Examination (RCE) in compliance with 37 CFR periods:	lies: (1) an amendment, affidavit (with appeal fee) in compliance v	, or other evidence, w with 37 CFR 41.31; or	hich places the (3) a Request
a) $\stackrel{\bullet}{\boxtimes}$ The period for reply expires $\underline{4}$ months from the mailing date of the	he final rejection.		
b) The period for reply expires on: (1) the mailing date of this Adviss no event, however, will the statutory period for reply expire later Examiner Note: If box 1 is checked, check either box (a) or (b). OMONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).	than SIX MONTHS from the mailing DNLY CHECK BOX (b) WHEN THE	date of the final rejectio FIRST REPLY WAS FIL	n. .ED WITHIN TWC
Extensions of time may be obtained under 37 CFR 1.136(a). The date on w have been filed is the date for purposes of determining the period of extensi under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the short set forth in (b) above, if checked. Any reply received by the Office later thar may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL	ion and the corresponding amount of tened statutory period for reply origin	of the fee. The appropria nally set in the final Office	te extension fee e action; or (2) as
2. The Notice of Appeal was filed on A brief in compliant filing the Notice of Appeal (37 CFR 41.37(a)), or any extension Notice of Appeal has been filed, any reply must be filed within AMENDMENTS	n thereof (37 CFR 41.37(e)), to	avoid dismissal of the	
3. The proposed amendment(s) filed after a final rejection, but proposed amendment filed after a final rejection, but proposed amendment filed after a final rejection filed after a filed	eration and/or search (see NOT	E below);	
 (c) ☐ They are not deemed to place the application in better f appeal; and/or (d) ☐ They present additional claims without canceling a corresponding to the content of the corresponding to the			e issues for
NOTE: (See 37 CFR 1.116 and 41.33(a)).	coponaing namber of imany reje	oted claimo.	
4. The amendments are not in compliance with 37 CFR 1.121.	See attached Notice of Non-Cor	npliant Amendment (F	PTOL-324).
5. Applicant's reply has overcome the following rejection(s):		,	,
 Newly proposed or amended claim(s) would be allowed non-allowable claim(s). 		mely filed amendmen	t canceling the
7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is provided. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: Claim(s) withdrawn from consideration:		be entered and an ex	planation of
AFFIDAVIT OR OTHER EVIDENCE			
 The affidavit or other evidence filed after a final action, but be because applicant failed to provide a showing of good and sur was not earlier presented. See 37 CFR 1.116(e). 			
 The affidavit or other evidence filed after the date of filing a New entered because the affidavit or other evidence failed to overcommunity a good and sufficient reasons why it is necessary and 	come <u>all</u> rejections under appea d was not earlier presented. Se	l and/or appellant fails e 37 CFR 41.33(d)(1)	to provide a
10. ☐ The affidavit or other evidence is entered. An explanation of REQUEST FOR RECONSIDERATION/OTHER	the status of the claims after en	try is below or attache	ed.
 The request for reconsideration has been considered but do See Continuation Sheet. 		condition for allowand	ce because:
12. ☐ Note the attached Information <i>Disclosure Statement</i>(s). (PTC13. ☐ Other:	O/SB/08) Paper No(s)		
	/Stuart Hendrickson/		
	Primary Examiner, Art Ui	nit 1793	

Continuation of 11. Applicant presents arguments based on Wakamura et al. (Colloids and Surfaces, cited in IDS). Applicant argues that the method of performing the exchange of the calcium ion with the iron ion has profound effects on whether exchange occurs or not. Furthermore, applicant argues that the reference teaches that the immersion method had no surface iron. However, the Wakamura explicitly teaches substitution with ion-exchange of Fe on calcium hydroxyapatite particles (Section 2.2 Pg298). Therefore, even if the reference shows that the immersion method does not provide iron ions on the surface of the apatite, it still does not suggest that the exchange did not provide the Fe ion anywhere within the structure or below the surface. The claims only require that the Fe is bound to the apatite via a phosphate group and not necessarily on the surface of the apatite. Furthermore, the art rejections are made over both Atsumi and Ichitsuka. Regarding Atsumi, a hydroxy apatite which carries iron is taught. Atsumi further defines that the iron or any other metals which are "carried" on the apatite are carried by ion exchange with the calcium ion (Para [0019] - [0021]). Since the calcium ion is bonded to the phosphorus an ion exchange with calcium would bind the Fe ion to the phosphorus. In addition, the parameters such as particle size and flow rate are result effective variables since the controlling the particle size would result in a higher or lower surface area of contact between the solid in the column and the liquid mobile phase. The flow rate of iron can result in a higher or lower rate of diffusion of the iron into the apatite. One skilled in the art would have knowledge of such concepts and would have been able to perform routine experimentation to optimize them. Ichitsuka provides a particle size for the apatite from about 2-100 micrometers and teaches absorption of a mobile phase onto the apatite.